

WHAT IS CLAIMED IS:

1. An acrylate-styrene-acrylonitrile type (ASA) composition comprising:

- a) a matrix phase comprising (i) a terpolymer of vinyl carboxylic acid ester monomer, a vinyl aromatic monomer and a vinyl cyanide monomer and (ii) a homopolymer or copolymer of vinyl carboxylic acid ester;
- b) a graft copolymer comprising (i) a substrate copolymer and (ii) a superstrate copolymer, wherein the substrate copolymer comprises a copolymer derived from a vinyl carboxylic acid ester monomer and wherein the superstrate copolymer comprises a copolymer derived from both a vinyl aromatic monomer and a vinyl cyanide monomer, and

wherein the matrix phase is present at a weight percent level of from about 75 to about 25 weight percent of the total weight of the composition;

15 wherein the graft copolymer is present at a level of from about 25 to about 75 weight percent of the total weight of the composition.

2. The ASA composition of claim 1, wherein the graft copolymer comprises about 75% to about 25% weight percent of a substrate copolymer and about 25% to about 75% weight percent of a superstrate copolymer.

20 3. The ASA composition of claim 1, wherein the matrix copolymer is derived from a vinyl carboxylic acid ester homopolymer and a vinyl carboxylic acid ester-vinyl aromatic-vinyl cyanide terpolymer.

4. The ASA composition of claim 3, wherein the vinyl carboxylic acid ester homopolymer is PMMA and the vinyl carboxylic acid ester-vinyl aromatic-vinyl cyanide copolymer is MMASAN.

5. The ASA composition of claim 4, wherein the PMMA comprises from about 20 to about 80 weight percent of the matrix copolymer and the MMASAN comprises about 80 to about 20 weight percent of the matrix copolymer.

6. The ASA composition of claim 4 wherein the range of MMA:S:AN in the MMASAN is about 80/15/15 to 30/50/20.

10 7. The ASA composition of claim 1, wherein the vinyl carboxylic acid ester is methyl methacrylate, the vinyl aromatic is styrene, the vinyl cyanide is acrylonitrile.

15 8. The ASA composition of claim 1, wherein the vinyl carboxylic acid ester of the substrate copolymer is butyl acrylate, the vinyl aromatic of the superstrate copolymer is styrene, and the vinyl cyanide of the superstrate copolymer is acrylonitrile.

20 9. The ASA composition of claim 1, wherein the vinyl carboxylic acid ester is methyl methacrylate, the vinyl aromatic is styrene, the vinyl cyanide is acrylonitrile, the vinyl carboxylic acid ester of the substrate copolymer is butyl acrylate, the vinyl aromatic of the superstrate copolymer is styrene, and the vinyl cyanide of the superstrate copolymer is acrylonitrile.

10. The ASA composition of claim 1, wherein the ASA resin is characterized by an opacity of less than 91 percent.

11. The ASA composition of claim 1, wherein the ASA resin further comprises a pigment selected from the group consisting of dry colorants, liquid colorants, color concentrates, encapsulated pigments, pigment dispersions, universal concentrates, freeze-dried concentrates, multifunctional concentrates and physical mixtures thereof.

12. An acrylate-styrene-acrylonitrile type composition comprising:

10 a) a matrix phase derived from a vinyl carboxylic acid ester monomer (A), and a terpolymer (B) derived from a vinyl carboxylic acid ester, a vinyl aromatic and a vinyl cyanide, wherein the matrix composition of A:B is such that said composition has an opacity of less than about 91%;

15 b) a graft copolymer comprising a substrate copolymer and a superstrate copolymer, wherein the substrate copolymer comprises a copolymer derived from a vinyl carboxylic acid ester monomer and the superstrate copolymer comprises a copolymer derived from both a vinyl aromatic monomer and a vinyl cyanide monomer; and

20 wherein the matrix phase is present at a weight percent level of from about 25% to about 75% percent by weight based on the total weight of the composition, and

wherein the graft copolymer is present at a level of from about 25% to 75% weight percent of the total weight of the composition.

13. The ASA composition of claim 12, wherein the graft copolymer comprises about 75% to about 25% weight percent of a substrate copolymer and about 25% to about 75% weight percent of a superstrate copolymer.

14. The ASA composition of claim 12, wherein the vinyl carboxylic acid

5 ester homopolymer is PMMA; the vinyl carboxylic acid ester-vinyl aromatic-vinyl cyanide copolymer is MMASAN.

15. The ASA composition of claim 12, wherein the vinyl carboxylic acid ester of the substrate copolymer is butyl acrylate, the vinyl aromatic of the superstrate copolymer is styrene, and the vinyl cyanide of the superstrate copolymer is acrylonitrile.

16. The ASA composition of claim 12, wherein the ranges of MMA:S:AN in the MMASAN is between about 85/15/15 to about 30/50/20.

17. The ASA composition of claim 12, wherein the ASA resin further comprises a pigment selected from the group consisting of dry colorants, liquid colorants, color concentrates, encapsulated pigments, pigment dispersions, universal concentrates, freeze-dried concentrates, multifunctional concentrates and physical mixtures thereof.

18. A method to improve the translucency of an acrylate-styrene-acrylonitrile type composition, said method comprises:

20 a) blending about: (i) 25% to about 75% percent of a matrix phase derived from a vinyl carboxylic acid ester monomer (A), and a terpolymer (B) derived from a vinyl carboxylic acid ester, a vinyl aromatic and a vinyl cyanide; and (ii) about 25% to 75% weight percent of a graft copolymer comprising a substrate copolymer and a superstrate copolymer, wherein the substrate

copolymer comprises a copolymer derived from a vinyl carboxylic acid ester monomer and the superstrate copolymer comprises a copolymer derived from both a vinyl aromatic monomer and a vinyl cyanide monomer; and

b) adjusting the ratio of A:B in said matrix phase such that said

5 acrylate-styrene-acrylonitrile type composition has an opacity of less than about 91%.

19. The method of claim 18, wherein the graft copolymer comprises about 60% to about 30% weight percent of a substrate copolymer and about 40% to about 70% weight percent of a superstrate copolymer; and the vinyl carboxylic acid ester homopolymer is PMMA; the vinyl carboxylic acid ester-vinyl aromatic-vinyl cyanide copolymer is MMASAN.

20. The method of claim 18, wherein the ranges of MMA:S:AN in the MMASAN is between about 85/15/15 to about 30/50/20.